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Bureau of Entomology and Plant Quarantine
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COOPERATIVE ECONOMIC INSECT REPORT

Vol. 1 For two-week period ending August 31, 1951 No. 3

Japanese beetle (Popillia japonica Newm.) -- First beetle in California taken July 20 in trap in vicinity of Municipal Airport, Mines Field, Inglewood. It was a female devoid of eggs. Soil around trap treated. (H. M. Armitage).

Live Japanese beetles were taken twice during July at Honolulu, Hawaii, airport from planes originating in Japan. (C. E. Cooley).

Summary of Insect Conditions

European corn borer second-generation injury started in the southern part of the Corn Belt States. Some eggs laid in the central part of the region. Moths slowly emerging in the northern part of the region. Prospect of extensive damage by second-generation slight except in a few restricted localities.

Fall armyworm infestations in Delaware, South Carolina, Mississippi, Louisiana, and Arkansas.

Codling moth second-brood injury general but light in the eastern part of the country. Some wormy fruit in Yakima Valley of Washington.

Red-banded leaf roller infestations more injurious than usual in Massachusetts, New York, New Jersey, Pennsylvania, and West Virginia. Light infestations in the Ohio Valley.

Oriental fruit moth fourth-brood larval damage to late varieties of peach in New Jersey possible during September. Large numbers of fourth-brood moths captured in Yakima Valley of Washington.

Two-spotted spider mite infestations more injurious than usual to fruit in the northeastern part of the country. Increasing rapidly in extreme southern Illinois, where damage to fruit is possible before harvest unless controlled. Damage to beans in Maryland, Virginia, Alabama, Idaho, Utah, Washington, and California.

European red mite populations decreased in New York and Pennsylvania and increased in northern Ohio.

Mexican bean beetle infestations light to moderate throughout the eastern part of the country. More widespread in Utah than ever before.

Bean aphid damage in Delaware, Pennsylvania, Maryland, and Washington.

Potato leafhopper infestations on beans in Delaware, Virginia, Pennsylvania, and Ohio, and on potato in southern Wisconsin.

Potato aphid damage to potato in Connecticut, and Long Island, N. Y., and to tomato in New Jersey, Delaware, and Virginia.

Boll weevil infestations continue light generally, but some increase in Virginia, North Carolina, and South Carolina.

Bollworms increasing throughout most of the Cotton Belf except in Texas.

Screw-worm infestations light in Florida and Georgia.

Summary of the Insecticide Situation

TDE supply continues short in the Vincennes district of Indiana. (EPQ).

CEREAL AND FORAGE INSECTS

European corn borer (Pyrausta nubilalis (Hbn.)) -- Emergence of moths practically complete in the southern part of the Corn Belt States. Some eggs laid on late corn and shot-hole injury appearing. No evidence of highly damaging infestations in this area. Throughout the central region pupation nearly complete. Some eggs laid. In the east-central area, near the Atlantic Coast, second-generation may be more serious than first. In the northern tier of States pupation just started and emergence of moths low. Prospect of extensive damage by second generation is slight except in a few restricted localities. (EPQ). Conditions in Minnesota indicate that general treatment for second-generation on field corn will not be necessary. There may be some exceptions in late-planted corn in the south-central district where pupation is well advanced and the southwest where populations of the first generation quite high. (European Corn Borer Inf. Bul. Univ. Farm, Minn.). Surveys in North Dakota showed average infestation in southwestern part of the State, 76 percent or 273 borers per 100 plants, in the northeastern part, 10 percent or 24 borers per 100 plants, and in the east-central part, 63 percent or 227 borers per 100 plants. (Weekly Ins. Pest Inf. Bul., N. D. Agr. Col.).

Grasshoppers (Acrididae) -- Increasing, especially in central and southern Indiana. Serious problems in some districts, especially in legume. (J. J. Davis). Melanoplus mexicanus (Sauss.)), M. femur-rubrum (Deg.)), and Camnula pellucida (Scudd.)) are very abundant in Marinette, Vilas, Oneida, Washburn, and Dunn Counties, Wisc. (E. L. Chambers). Populations extremely low in central and northeastern North Dakota. Increasing in intensity and area southeast of Willow City in Bottineau County. Late crops and alfalfa may be damaged when small grains harvested. South of Emmet in McLean County hoppers number up to 50 per square yard in margins and up to 10 in fields. M. bivittatus (Say)) constitutes 75 percent, with a scattering of M. mexicanus, M. packardii Scudd., and M. differentialis (Thos.)). (Weekly Ins. Pest Inf. Bul. N. D. Agr. Coll.). C. pellucida damaging alfalfa for seed and hay in Toole County, Utah, and meadows in San Pete County. M. mexicanus, M. femur-rubrum and other species sufficiently abundant at South Kanab, Kane County, to damage range and crops. (G. F. Knowlton). Considerable damage to foliage of young fruit trees, vegetables, and flowers in Yakima Valley of Washington. (EPQ).

Fall armyworm (Laphygma frugiperda (A. & S.)) -- Light infestations on sweet corn east of Georgetown, Del. (Late News about Insects, Univ. Del.). Abundant on grass in Charleston district, S. C. (EPQ). Found in five cotton fields in the Delta of Mississippi. (EPQ). Complaints of damage throughout most of Louisiana. (Ins. Pest Surv. Serv. Leaflet, Univ. La.). Local infestations in areas south of the Missouri River in Missouri. (L. Haseman). Damage to hay crops and soybeans in Arkansas. (G. Barnes).

Corn earworm (Heliothis armigera (Hbn.)) -- Moderately abundant in southeastern Wisconsin. (E. L. Chambers). Development was slow in Missouri; severe infestation not reached until third week of August. (L. Haseman). Heavy infestations in sweet corn in northern Utah. (G. F. Knowlton).

Wheat-stem sawfly (Cephus cinctus Nort.) -- Infestation in North Dakota about same as in 1950. (Weekly Ins. Pest Inf. Bul. N. D. Agr. Coll.).

Potato leafhopper (Empoasca fabae (Harr.)) -- Infestations in alfalfa at Rockville and Gambrills, Md. (T. L. Bissell).

Clover seed chalcid (Bruchophagus gibbus (Boh.)) -- Unusually abundant in alfalfa seed crop in Utah. (G. F. Knowlton).

A mite (Paratetranychus pratensis (Banks)) -- Severe damage to wheatgrass, fescue, and timothy in vicinities of Spokane and Pullman, Wash. Present on beardless barley. (H. S. Telford). Infestations in southeastern Idaho on pubescent wheatgrass at Aberdeen and on Mountain bromegrass at Tetonia. (EPQ).

FRUIT INSECTS

Codling moth (Carpocapsa pomonella (L.)) -- Second-brood larval entrances in unsprayed trees in eastern New York. Infestation very light in Niagara County. (N. Y. St. Coll. Agr., News Letter). Second-brood larvae active in some central and southern New Jersey apple orchards. Infestation in some orchards of fall and winter varieties sufficient to justify spraying. (A. J. Farley). Second-brood injury light, but general in the Kearneysville district of West Virginia. (EPQ). Second-generation injury in some apple orchards in southern and eastern Pennsylvania. (J. O. Pepper). Second-brood entrance on increase in Ohio. (C. R. Cutright). Injury in poorly-sprayed orchards at Orleans, Ind. (G. E. Marshall). Few fresh entrances in apple orchards in southern Illinois where a moderate first brood occurred. (S. C. Chandler). Conderable wormy fruit in Yakima Valley of Washington. (EPQ).

Red-banded leaf roller (Argyrotaenia velutinana (Wlkr.)) -- Second-brood larvae more abundant than usual in Massachusetts. (Spray Message for

Fruit Growers, Univ. Mass.). Infestations in scattered localities throughout Hudson Valley and in Niagara County, N. Y. (N. Y. St. Coll. Agr., News Letter). More abundant than usual in New Jersey. Second-brood larvae vary from young to full-grown. Few pupae present. Some third-brood larvae may appear before September 1. (A. J. Farley). Injury to fruit and foliage of apple and peach in south-central and southeastern Pennsylvania. (J. O. Pepper). Emergence of second-brood nearly complete in Kearneysville district, W. Va. (EPQ). Injury by second-brood common in Ohio, but not commercially important. (C. R. Cutright). Some larval activity in Vincennes district, Ind. (EPQ). Infestation in Rock Island district, Ill. (Spray Service Report, Univ. Ill.).

Oriental fruit moth (*Grapholitha molesta* (Busck)) -- Third-brood moth emergence underway in Hudson Valley a few moths captured in Niagara County, N. Y. (N. Y. St. Coll. Agr., News Letter). Fourth-brood larvae damage possible to late varieties of peach in New Jersey during September. (A. J. Farley). Examination of peach fruits in southern New Jersey showed 9.8 percent average injury. (EPQ). Very few infested peaches in Pennsylvania. (J. O. Pepper). Some wormy peaches in southern Illinois. (S. C. Chandler). Large numbers of fourth-brood moths in bait traps in the Yakima Valley, Wash., which may result in noticeable infestations in late peaches. (EPQ).

Peach twig borer (*Anarsia lineatella* Zell.) -- Infestation in peach fruit in the Yakima Valley heavier than anticipated, due chiefly to lack of control last two seasons when crop was light or absent. (EPQ).

Yellow-necked caterpillar (*Datana ministra* (Drury)) -- Destructive in the Kearneysville district of West Virginia; more widespread than last year. (EPQ).

Apple maggot (*Rhagoletis pomonella* (Walsh)) -- Severe injury to apples and prunes in Wayne County, N. Y., where recommended sprays not applied. (N. Y. St. Coll. Agr., News Letter).

Two-spotted spider mite (*Tetranychus bimaculatus* Harvey) -- Abundant in apple and peach orchards in lower Hudson Valley and on apple, peach, and prune in Niagara County, N. Y. (N. Y. St. Coll. Agr., News Letter). More abundant than usual in Delaware. (Late News about Insects, Univ. Del.). Fairly abundant in apple and peach orchards of southern and eastern Pennsylvania. More abundant than European red mite. (J. O. Pepper). Increasing in Kearneysville district, W. Va. Considerable bronzing of apple foliage. (EPQ). Abundant at Orleans, Ind. (G. E. Marshall). Increasing rapidly in extreme southern Illinois, damage before harvesting possible unless controlled. (Spray Ser. Rpt., Univ. Ill.).

European red mite (Paratetranychus pilosus (C. & F.)) -- Populations decreased in lower Hudson Valley; heavy in Niagara County, N. Y. (N. Y. St. Coll. Agr., News Letter). Bronzing of foliage in some apple orchards in New Jersey; other orchards have sufficient populations to cause bronzing unless a miticide is applied. (A. J. Farley). Normal infestations in Delaware. (Late News about Insects, Univ. Del.). Populations decreased in most areas of Pennsylvania. (J. O. Pepper). Injury increased in northern Ohio. (C. R. Cutright).

Plum curculio (Conotrachelus nenuphar (Hbst.)) -- The adult population in peach orchards in central Georgia is lighter than usual; therefore, no post-harvest application of insecticides will be made. (EPQ).

Cherry fruit fly (Rhagoletis cingulata (Loew)) -- Very abundant in several localities in northern Indiana this year, the first report of serious damage for several years. (J. J. Davis). A new infestation in cultivated cherry at Dunsmuir, Siskiyou County, Calif. (H. M. Armitage).

Black-headed fireworm (Rhopobota naevana (Hbn.)) -- Abundant on some Grayland cranberry bogs in western Washington, where spraying has been neglected the last two years. (D. J. Crowley).

Scale insects (Lecanium sp.) -- Hatching about two weeks earlier than last year on the cranberry bogs of western Washington. (D. J. Crowley).

A Mite (Tetranychus flavus Ewing) -- Increasing in importance in raspberry fields in the Puyallup district of Washington. (E. P. Breakey).

Cranberry fruitworm (Mineola vaccinii (Riley)) -- Abundant on blueberry in vicinities of Grand Haven, Muskegon, and Grand Junction in southwestern Michigan. (R. Hutson).

California red scale (Aonidiella aurantii (Mask.)) -- Infestations on young citrus trees in widely scattered localities in the Lower Rio Grande Valley of Texas, especially around Los Fresnos and Harlingen, Cameron County and Monte Alto, Hidalgo County. (A. N. White).

VEGETABLE INSECTS

Mexican bean beetle (Epilachna varivestis (Muls.)) -- Second-brood appearing in up-state districts of New York. (N. Y. St. Coll. Agr. News Letter). Plentiful in Pennsylvania. (J. O. Pepper). Numerous in Montcalm and Mecosta Counties, Mich. (R. Hutson). Some injury in Maryland. (T. L. Bissell). Light to moderate injury in eastern Virginia. (EPQ and State cooperating). Numerous in Oconee County, S. C. (C. H. Griffin, County Agent). Light infestations in home gardens at Charleston, S. C. Moderately abundant in southern Georgia and northwestern Florida. Injury to limas. Abundant on beans, especially limas in northwestern Tennessee. (EPQ). Serious damage in Union and Fannin Counties, Ga. (J. Taylor). Damaging beans in Alabama. (F. S. Arant). Moving from snap bean fields to limas in considerable numbers at Athens, Ohio. (W. C. Stehr). Lima beans injured at Columbus, Ohio; egg masses being dried up by hot, dry weather. (EPQ). Very destructive in eastern half of Missouri. Practically every planting of beans not thoroughly sprayed in Boone County destroyed. (L. Haseman). Damage to beans in home gardens in northern Utah. (G. F. Knowlton). Damage increasing in several canning-bean districts of Utah. The insect is spread over a larger bean-growing district of Utah than ever before. Small populations in commercial dry-bean fields in Arkansas Valley and Greeley district in northern Colorado and in North Platte Valley of Nebraska and Wyoming. (EPQ).

Corn earworm (Heliothis armigera (Hbn.)) -- Injured beans in Delaware. (Late News about Insects, Univ. Del.).

Bean aphid (Aphis fabae Scop.) -- Infesting lima beans and black-eyed peas in Delaware. (Late News about Insects, Univ. Del.). Fairly heavy infestation in southern Pennsylvania. (J. O. Pepper). On lima beans in Talbot County, Md. (T. L. Bissell). Extensive colonies developed on Canada thistle in Skagit and Whatcom Counties, Wash.; has not spread to beans. (EPQ).

Potato leafhopper (Empoasca fabae (Harr.)) -- Abundant on beans in Delaware. (Late News about Insects, Univ. Del.). Present on beans in eastern Virginia. (EPQ and State cooperating). Fairly abundant on snap and lima beans in southern Pennsylvania. (J. O. Pepper). Moderately abundant on beans at Columbus and Chillicothe, Ohio. (EPQ). Abundant on potatoes in southern Wisconsin, where thorough spraying not carried on. (C. L. Fluke). Increasing on potato in North Dakota. (Weekly Ins. Pest Inf. Bul., N. D. Agr. Coll.).

Two-spotted spider mite (Tetranychus bimaculatus Harvey) -- Abundant on beans in gardens near College Park, Md. (T. L. Bissell). Present on beans in eastern Virginia. (EPQ and State cooperating). Injuring beans in Alabama. (F. S. Arant). A few bean fields in southern Idaho required treatment. Light to moderate infestations on canning beans and light infestations on lima beans in several places in Utah. Noticeable damage at Grandview, central Washington, necessitating acaricide application. Heavy infestation on 2,000 acres lima beans in Ventura County and 80 acres in Orange County; damage to snap beans in Los Angeles County, Calif. (EPQ).

Garden fleahopper (Halticus bracteatus (Say)) -- Considerable damage to beans, watermelons, and cantaloupes in Delaware. (Late News about Insects, Univ. Del.). Considerable injury to tomatoes in New Jersey. (O. Starnes).

Pea moth (Laspeyresia nigricana (Steph.)) -- Two moths taken in bait traps in Yakima Valley, Wash. These are first reported from the valley since 1943 when several were taken. (EPQ).

Potato aphid (Macrosiphum solanifolii (Ashm.)) -- Heavy infestations in some potato fields in eastern part of Connecticut River Valley of Connecticut. (J.B. Kring). Threatening populations on potato in Suffolk County, N. Y. (N. Y. St. Coll. Agr., News Letter). Aphid population reached serious proportions on individual tomato fields in New Jersey. (O. Starnes). Heavy infestations on tomato and squash in Delaware. (Late News about Insects, Univ. Del.). Infesting tomato in eastern Virginia. (EPQ and State cooperating).

A Whitefly (Aleyrodes spiraeoides Quaint.) -- Unusually abundant on potato in Yakima Valley of Washington. (EPQ).

Tomato fruitworm (Heliothis armigera (Hbn.)) -- Moderate damage in New Jersey. (O. Starnes). Adults abundant in tomato field in eastern Virginia. (EPQ and State cooperating). Moderately abundant in Charleston district, S. C. (EPQ). Serious damage in northwestern Tennessee. (EPQ). Very light infestations in Utah. (EPQ).

Cabbage caterpillars -- Numerous locally in parts of New York, South Carolina, North Carolina, and Ohio.

Squash bug (Anasa tristis (Deg.)) -- Heavy infestation at Delta, Millard County, and at St. George, Washington County, Utah. (G. F. Knowlton).

Pepper maggot (Zonosemata electa (Say)) -- Severe injury to pepper in Suffolk County, N. Y. (N. Y. St. Coll. Agr., News Letter).

A Mite (Septanychus sp.) -- Unusually abundant on hops at Roy, Pierce County in western Washington. (E. P. Breakley).

Aphids on tobacco -- Injurious in many fields in Calvert County, Md. (T. L. Bissell). Infestations in northwestern Tennessee confined to individual plants. (EPQ).

COTTON INSECTS

Boll weevil (Anthonomus grandis Boh.) -- Injury to squares increasing in Virginia. (W. L. Howe). Increasing in North Carolina; however, light infestations in many fields in western and northern border counties. In general, migrations well underway in most of cotton-producing counties. Of 193 poisoned fields in 34 counties, 180 infested at average of 18 percent punctured squares; of 122 unpoisoned fields, 121 infested at average of 49 percent punctured squares. (Cotton News Letter, Ext. Serv. N. C.). Infestations increased in South Carolina. All of 54 unpoisoned fields in 18 counties infested at average of 91 percent punctured squares. In 54 poisoned fields average infestation 60 percent punctured squares. (EPQ). Of 98 poisoned fields in 19 counties of Georgia, 92 infested at average of 11 percent punctured squares. All of 69 unpoisoned fields infested at average of 22 percent punctured squares. (EPQ and State cooperating.). In Alabama weevils found in 63 of 75 fields at average of 11 percent punctured squares. (EPQ). In Tennessee weevils in 38 of the 54 fields examined at average of 11 percent punctured squares. The heaviest infested fields in Fayette, Hardin, and McNairy Counties. (A. P. Morris). In Mississippi, of 558 fields, 423 infested at average of 11 percent punctured squares. Many of the high infestation records mean little as cotton was maturing and there were very few squares. (EPQ). Heavy rains in Louisiana during first 10 days of August accounts for increased damage. Of 717 fields in 10 parishes weevils found in all fields at average of 20 percent punctured squares. (EPQ). A limited amount of migration observed in Shreveport district, La. (L. D. Newsom). The second generation is a serious threat in Arkansas as there is a great deal of very late cotton. In southwestern counties average infestation 18 percent, in southeastern counties 24 percent, and in northeastern counties 13 percent punctured squares. (C.Lincoln). Well under control in Oklahoma. Of 182 fields in 31 counties 157 infested. Heaviest infestations in Okfulgee, Payne, and Wagoner Counties. (C. F. Stiles). Weevils migrating in search of food, squares or young bolls, in many areas of Texas. Still numerous enough in some fields in the northern and northeastern parts of the State to cause damage. Infestation in 381 fields in 53 counties averaged 16 percent punctured squares. Cotton matured unusually early in Texas. (EPQ).

Bollworms (Heliothis spp. et el) -- Present or increasing in 26 counties throughout South Carolina. (Weekly Rept. Ext. Serv. S. C.). Present in cotton fields in Alabama. (W. A. Ruffin). Continue to be serious threat in the Delta of Mississippi. (EPQ). Seriously injuring young cotton in Madison Parish, La. Activity increasing in the Shreveport district of northwestern Louisiana. (Ins. Pest Surv. Serv. Leaflet, La. St. Univ.). More numerous than at any time in the last 9 years in Arkansas. Counts in one field in Ashley County showed 104 larvae and 44 eggs per 100 terminals. Fields in other sections of the State average as high as 20 larvae per 100 terminals. (G. Barnes). Heaviest and most widespread infestations in Texas present in western areas, mostly in the irrigated cotton on the South Plains and in the Pecos and El Paso Valleys. A few infestations requiring control measures in northwestern, north-central, and northeastern sections of the State. (EPQ and State cooperating). In New Mexico, infestations very general and rather heavy in Pecos and Mesilla-Rincon Valleys, and Deming district. (EPQ and State cooperating). Sufficiently abundant in Salt River and Safford Valleys of Arizona to require control measures. Injurious in other localized districts throughout southern Arizona. (Weekly Cotton Ins. Rept. Univ. Ariz.).

Cotton leafworm (Alabama argillacea (Hbn.)) -- To date this year found in only three counties in Texas, Cameron, Lamb, and Mitchell. (Cotton Ins. Situation in Texas, Ext. Serv., Tex.).

Spider mites (species undetermined) -- Injury evident in nearly all dusted fields examined in Virginia. (W. L. Howe). Infestations somewhat checked in South Carolina by general rains and scattered showers throughout the State. In areas where dry weather prevails infestations persist. (Weekly Rept. Ext. Serv. S. C.). Considerable damage in Richland, Lexington, Saluda, Abbeville, Newberry, Greenville, Spartanburg, Chester, and Kershaw Counties, S. C. (EPQ). Considerable acreage of cotton in dry areas of the Tennessee Valley section of Alabama seriously damaged. (W. A. Ruffin). Found in 14 of 75 fields in 10 counties in the northeastern part of Alabama. Serious damage in two fields. (EPQ). Damaging numbers in scattered localities in Mesilla-Rincon and Salt River Valleys, and Deming district, New Mexico. (EPQ and State cooperating).

INSECTS ATTACKING FOREST AND SHADE TREES

Gypsy moth (Porthetria dispar (L.)) -- The large number of male moths captured at traps in western Vermont, eastern New York, and Connecticut seem to confirm previous indications of a general increase in population in many sections of the infested area. (EPQ).

Elm leaf beetle (Galerucella xanthomelaena (Schr.)) -- Foliage of elms in Connecticut seriously damaged. (B. W. McFarland). Elms in southern New Hampshire show effects of heavy feeding. (EPQ). Unusually destructive in Puyallup district of Washington. Many trees defoliated. (E. P. Breakey).

Walnut caterpillar (Datana integerrima G. & R.) -- Walnut and hickory trees in Connecticut defoliated. (P. Bellinger).

Sycamore lace bug (Corythucha ciliata (Say)) -- Discoloration of foliage of sycamore in New Haven and Hartford Counties, Conn. (EPQ).

Walkingstick (Diapheromera femorata (Say)) -- Very abundant in northeastern Wisconsin from Marinette County to Marathon County. (E. L. Chambers).

White-pine weevil (Pissodes strobi (Peck)) -- Very abundant in white-pine-growing counties of northern Wisconsin; much less prevalent in southern counties. Jack pine and red pine attacked also. (E. L. Chambers).

White-pine aphid (Cinara strobi (Fitch)) -- White-pine trees for miles along Wilbur Cross Parkway in Connecticut infested. (J. B. Kring).

INSECTS AFFECTING MAN AND ANIMALS

Screw-worm (Callitroga americana (C. & P.)) -- Infestations in southern half of Florida peninsula lighter than at any time since the outbreak in 1933. The spread northward slow. Isolated cases to light general infestations occur to northern border of Florida westward to Leon County and into Georgia counties of Lowndes, Clinch, Ware, Camden, Glynn, and McIntosh. (EPQ).

A Horse fly (Tabanus sulcifrons Macq.) -- Appeared in considerable numbers in Missouri during the last half of August. However is less abundant than usual. (L. Haseman).

Brown-banded roach (Supella supellectilium (Serv.)) -- Specimens from Vacaville, Solano County and Palo Alto, Santa Clara County, Calif. (H. M. Armitage).

STATE CLEARING OFFICES FOR ECONOMIC INSECT INFORMATION
(Supplement to list in Report of July 31, 1951)

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